REQUEST FOR PROPOSAL
Addendum # 8

King County
Department Of Executive Services
Finance and Business Operations Division
Procurement and Contract Services Section
206-684-1681 TTY RELAY: 711

ADDENDUM DATE: October 7, 2004

RFP Title: **On-Board Systems / Communication Center System**

RFP Number: **04-001PR**

Due Date/Time: **October 28, 2004 - 2:00 P.M.**

Buyer: **Paul Russell**, *paul.russell@metrokc.gov* , 206-684-1054

Q #	Subsection	QUESTION	ANSWER
GENERAL QUESTIONS			
1.	Specification	The RFP technical specification provides detailed descriptions of how some functions are to work. Does King County Metro consider the functionality to be the requirement, and the "how" to be an example of how the requirement could be met? Please confirm that providing the functions through an alternate process will be considered compliant.	**CLARIFICATION:** See Addendum No. 5, Answer 51.
2.	Evaluation	The evaluation process is strongly oriented to the Level 1 standalone vehicle (no radio) technical solution. A down selection of vendors is then made based solely on the assessment (technical and cost) of the Level 1 functionality. This has the possibility of eliminating vendors with better overall solutions, i.e., a complete CAD/AVL solution. Additionally, the evaluation scoring allocates significantly fewer points on both the Level 2 solution and pricing. This in effect places a lower importance on the quality and completeness of the eventual solution (Level 2) that fully integrates the vehicles, radio system and fixed end system. In effect, a preference is given to firms with partial or vehicle-only solutions. Please consider modifying the evaluation criteria so that the down selection process considers both Level 1 and Level 2 components.	**CLARIFICATION:** The procurement strategy and evaluation process were carefully thought out and will remain unchanged.
3.	Implementation	Developing a temporary Level 1 only solution will add cost and time to the overall project, and may force the proposed solution to start with a less than desirable baseline (Level 1) approach for eventually providing Level 2 functionality. Will King County Metro accept a proposal that concurrently implements the	**CLARIFICATION:** No. KCM plans to implement in phases as stated in the RFP.

This Request for Proposal Addendum will be provided in alternative formats such as Braille, large print, audiocassette or computer disk for individuals with disabilities upon request

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		Level 1 and 2 solutions?	
4.	Part A, Vendor Response	King County Metro's specified format for vendor proposal responses is complex and requests more information/details than seem appropriate for performing comparative assessments of multiple proposals. Is it permissible for vendors to utilize an alternative, streamlined response approach that does not individually answer each of the questions embedded in the RFP or will that be treated as a non-compliant submittal?	**CLARIFICATION:** Part A of the RFP clearly describes what a responsive proposal must include. A proposal that is lacking in responsiveness (e.g., answers to the questions raised in the RFP not fully addressed) may be found non-compliant in the Phase I evaluation.
5.	Part A, Pricing Sheets	There appears to be a problem with this pricing table's calculations. Level 1 Design Phase, Milestone PDR, Hours Cell E-21 utilizes the %FTE value in its calculation of hours. Cells E-22, through E-41 do not use the %FTE in the calculation of hours in this column. Please validate that this is indeed in error and all should be the same as E-21. If so, will KCM issue a corrected soft copy spreadsheet.	**CLARIFICATION:** This is an error in the Part A, Pricing Sheets' calculations. Attachment One provides a replacement for the original Excel worksheet, which contains the error. All other worksheets should remain unchanged. **DELETE:** The first worksheet titled "**I. Level 1 Staffing**" from the Part A, Attachment B_Price.xls workbook. **REPLACE WITH:** The new worksheet, "**I. Level 1 Staffing v2**", attached to this Addendum 8 as a separate Excel file. This worksheet should be inserted into the Attachment B_Price.xls workbook supplied as part of the original RFP.
6.		Many cells contain a Microsoft Excel generated warning denoted by a green triangle in the upper left corner of the cell. Reference cell Level 1 Staffing cell G-21 as one example. When you click on the cell, a warning icon appears. When you click on the icon it states "Inconsistent Formula." Please validate if there are any calculation issues with these error messages. If so, will KCM issue a corrected soft copy spreadsheet.	**CLARIFICATION:** The formulas provided by KCM are correct. The current version of Excel has numerous "features" for error checking. One of them is activated when formulas in adjacent cells are different. In order to turn off this feature click on *Tools* in the main menu, then click on *Options > Error Checking > unselect: Inconsistent formula in region*.
Part A, Section 1 Proposal Preparation			
7.	Subsection A.1.T.2. Proposal Preparation	KCM states that electronic proposal information shall be in Microsoft Office 95 Word and Excel formats. Please verify that the requirement is in fact for electronic documents formatted in Office 95 and not Office 98 or later versions of the MS product. Additionally, we would like to know if KCM would consider it beneficial to	**CLARIFICATION:** Electronic documents should be formatted in Office 95, or later version, Word and Excel formats (see Addendum 2, Answer No. 4). The choice of which of these MS Office versions to use is for the proposer to determine.

Q #	Subsection	QUESTION	ANSWER
		also receive copies of the proposal documents in Adobe .PDF format in addition to the Office file formats	Also, KCM would find it beneficial to have a print shop-ready PDF version of the proposal document, formatted with appropriate Part and Section breaks. **DELETE:** portions of Subsection A.1.T.2 The Proposal shall be packaged and organized in accordance with the following: • Volumes 1, 2, 3 and 5: One original (marked ORIGINAL and unbound). Fourteen bound paper copies. ~~One electronic copy~~ on CD media. • Volume 4: One original (marked ORIGINAL and unbound). Four bound paper copies. ~~One electronic copy~~ on CD media. ~~The proposal information shall be in Microsoft Office 95, or later version, Word and Excel formats. Diagrams, graphics, drawings, and coverage plots shall be provided in a PDF format.~~ **REPLACE WITH:** The Proposal shall be packaged and organized in accordance with the following: • Volumes 1, 2, 3 and 5: One original (marked ORIGINAL and unbound). Fourteen bound paper copies. **Two electronic copies** on CD media. • Volume 4: One original (marked ORIGINAL and unbound). Four bound paper copies. **Two electronic copies** on CD media. **First electronic copy of proposal shall be in Microsoft Office 95, or later version, Word and Excel formats.** **Second electronic copy of proposal shall be provided in a PDF format, which is**

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			suitable for printing: **on both sides of each page and** **with blank pages inserted between the proposal's Parts and Sections to allow KCM to easily insert tabs/dividers upon printing.** **Diagrams, graphics, drawings, and coverage plots shall be provided in a PDF format, appropriately sized for printing.**
Part B, EXHIBIT 6 Software Maintenance			
8.	Exhibit 6, Paragraphs 3.6 and 3.7	Are the reaction and correction times (delivery of report 2 or 24 hours after notification, error correction within 8 or 72 hours) related to days or working days?	**CLARIFICATION:** Unless otherwise specified, references to hours and days relate to calendar days as per the definition of "Day" found in Part B, Exhibit 1 *Definitions.* Accordingly in this case, the hours specified refer to portions of calendar days.
9.	Exhibit 6, Paragraph 5.2	The payment terms here (annually) contradict the terms in contract paragraph 47.2.6 (quarterly payment). Please clarify.	**CLARIFICATION:** The County intends that an annual fee be specified but that it be paid in quarterly installments. To clarify: **DELETE:** portion of Paragraph 5.2 Following expiration of the Software Warranty Period, the County shall pay the Contractor the annual fee set forth in Exhibit 3, Section V, for OBS and CCS Software maintenance work performed according to the terms herein. The parties agree that the amount paid by the County represents a fixed annual fee that will be paid regardless of actual work performed. The Contractor shall invoice the County ~~annually~~, and the County will pay the Contractor within 30 days of receipt of invoice. **REPLACE WITH:** Following expiration of the Software Warranty Period, the County shall pay the Contractor the annual fee set forth in Exhibit 3, Section V, for OBS and CCS Software maintenance work performed according to the terms herein. The parties agree that the amount paid by the County represents a fixed annual fee that will be paid regardless of actual work performed. The Contractor shall invoice the County **in quarterly installments of the**

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			annual fee, and the County will pay the Contractor within 30 days of receipt of invoice.
Part C, SECTION 1 OBS/CCS Business Requirements			
10.	C.1	Please provide all interface information for the Vehicle Logic Unit.	**CLARIFICATION:** Attachment Two contains an updated Part C, Table 2.A.1.6.4.3 that provides updated information about the communications ports on the DDU, FTP and WDOLS. Subsection C.2.A.1.6.4.3 and the original table were added in Addendum 2, Answer 30. **DELETE:** Part C, Table 2.A.1.6.4.3. *KCM Equipment Communications Ports*. **REPLACE WITH:** Updated Part C, Table 2.A.1.6.4.3. *KCM Equipment Communication Ports* in Attachment Two.
11.	C.1.A.3.1	This paragraph states that the "contractor will be responsible for developing processes … with selected KCM business groups". Paragraph 1.A.5.a states that KCM staff will manage all work processes. Please clarify.	**CLARIFICATION:** Subsection C.1.A.3.1, Paragraph *Level 1* discusses the Contractor's responsibility for developing processes and tools for presenting and sharing OBS/CCS-generated *data* with KCM business groups. Data sharing refers to the production of reports and queries tailored to meet the needs of the specified business groups. For more information regarding this responsibility, see Subsection 2.A.1.7.5. Reporting Requirements and Subsection C.2.B.4.2.3 BO3-Manage Historical Data. Subsection C.1.A.5.a refers to the responsibility of KCM staff for making KCM *database* modifications and managing the work processes related to such modifications.
12.	C.1.A.5.f	This paragraph states that installation and testing of OBS and Base equipment is done by KCM staff. Other paragraphs state that this work is the contractor's responsibility (e.g. 2.B first bullet point). Please clarify.	**CLARIFICATION:** Subsection C.1.A.5.f is correct. The contractor is to provide installation planning and oversight as detailed elsewhere in the RFP (see Subsection C.2.A.3.1.2. Project Deliverables for preliminary requirements). **DELETE:** portion of Subsection C.2.B. Level

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			1 Functional Requirements. The Contractor shall meet the following objectives: Design, deliver, and ~~install~~ hardware and software onto the entire fleet of KCM Revenue Vehicles and at the transit bases. Replace and upgrade legacy on-board systems. Create a fully integrated environment that will interface to existing OBS Subsystems. Implement an enhanced Wireless Local Area Network (WLAN) system both on board and at each base to support full OBS functionality. **REPLACE WITH:** The Contractor shall meet the following objectives: Design, deliver, and **provide planning and oversight support for the installation and testing of** hardware and software onto the entire fleet of KCM Revenue Vehicles and at the transit bases. Replace and upgrade legacy on-board systems. Create a fully integrated environment that will interface to existing OBS Subsystems. Implement an enhanced Wireless Local Area Network (WLAN) system both on board and at each base to support full OBS functionality.
13.	C.1.C.5. OBS/CCS Level 1 – Table 1.C.5. Fleet and OBS Equipment Plan	During the Bidders Conference the bidders had access to 11 types of vehicles. One of the papers attached to one of the vehicles read: New Flyer 2800. Reference: Section 1.C.5. OBS/CCS Level 1 – Table 1.C.5. Fleet and OBS Equipment Plan Question: The table as per reference does NOT list a Flyer Vehicle with the number 2800. Please Clarify.	**CLARIFICATION:** The Fleet ID# 2800 has now been assigned to the KCM Planned 60' diesel vehicle type, planned for service in 2005. See Attachment Three, below, for an updated Part C, Table 1.C.5. Fleet and OBS Equipment Plan.
14.	C.1.C.5. OBS/CCS Level 1 – Table 1.C.5. Fleet and OBS Equipment Plan	The total APC equipped vehicles for Sound Transit is incorrect. The grand total of all systems to be equipped with APC systems is incorrect. Please clarify.	**CLARIFICATION:** Attachment Three, below, provides an updated Part C, Table 1.C.5. Fleet and OBS Equipment Plan with corrected numbers for the APC equipment.

Q #	Subsection	QUESTION	ANSWER
			the APC equipment. **DELETE:** Part C, Table 1.C.5. Fleet and OBS Equipment Plan. **REPLACE WITH:** The updated Part C, Table 1.C.5. Fleet and OBS Equipment Plan shown below in Attachment Three.
15.	C.1.C.5. OBS/CCS Level 1 – Table 1.C.5. Fleet and OBS Equipment Plan	The referenced table lists four (4) vehicle types that have not been included in the vehicles accessible during the bidders conference: Please confirm the following: The number of doors, door with and distance between doors of the: 3100 Gillig is comparable to the 3200 Gillig The KCM 60` diesel to be procured in 2005 is comparable to the 9500 New Flyer The Sound Transit 9600 60` hybrid is comparable to the 2600 60`hybrid The Sound Transit 60` diesel to be procured in 2005 is comparable to the 9500 New Flyer	**CLARIFICATION:** The 3100 Gillig is comparable to the 3200 Gillig: 3100s have a five foot shorter wheelbase than the 3200s; Doors are five feet closer together than the 3200s; Driver's station and door size are the same as the 3200s. The KCM 60` diesel to be *put into service* in 2005 is comparable to the 9500 New Flyer: This fleet (Fleet ID# 2800) has been delivered and these vehicles are essentially the same as the 2600s. The Sound Transit 9600 60` hybrid is comparable to the 2600 60`hybrid: Yes. The Sound Transit 60` diesel to be *put into service* in 2005 is comparable to the 9500 New Flyer: The ST 9537-9552 fleet is essentially the same as the KCM 2600s and the ST 9600s. See Attachment Three, below, for an updated Part C, Table 1.C.5. Fleet and OBS Equipment Plan.
Part C, SECTION 2 Level 1 Requirements			
16.	C.2.A.1.4.6.2	This paragraph states a required availability of 99.9% for servers, while paragraph 3.A.6.2.2 requires 99.999% for servers. Please resolve this contradiction.	**CLARIFICATION:** These are different availability standards, which relate to different sets of requirements. Level 1 requirements are stated in Subsection C.2.A.1.4.6.2, while Level 2 requirements are contained in Subsection 3.A.6.2.2 and relate specifically to the CCS server requirements.

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17.	C.2.B.4.1.3 3.1 Shut down OBS, pg 220	The VLU has to shut down different subsystems. Is there an interface to the PLC? What about busses with hardwired systems? Are there a relay for each switch which can be used?	**CLARIFICATION:** The VLU can signal when it is appropriate for other subsystems to shut themselves down or be shut down by providing a discrete signal to the PLC when it no longer needs some subsystems, again when it doesn't need others, and again when it is ready for power down. The PLC is able to sense these discrete signals and power down subsystems before its programmed time-out limit, at which point it would power down all attached subsystems anyway. This functionality may require adding input and output modules to the PLCs and reprogramming their ladder logic to accommodate the new channels, rules and times. This can save some unnecessary battery drain time. However, if the VLU hangs up and fails to initiate shut-down, then the PLC (or Charge Guard in a hard-wired bus) will turn everything off abruptly, after a set time period. None of this will happen by serial com-munication because that is outside the capability of the PLCs. It will happen by discrete signal wires being switched on or off, which will be monitored by the PLC's ladder logic and reacted to by switching the appropriate output module. Every step in the above scenario probably requires a separate discrete output from the VLU. On hard-wired coaches, all this will likely be accomplished by segmenting subsystems onto Charge Guarded circuits. The relays asked about are typically not presently installed. All of these will have to be reviewed for each fleet during the design phase.
18.	C.2.B.4.1.5 3.1 Basic Flow 5)k)	What is the interface to the security camera system for getting the health status?	**CLARIFICATION:** For a description of communications ports available on the DVRS system, see Answer 10 above and Part C, Appendix D *DVRS Interface*.
19.	C.2.B.4.1.10 7.3 Annunciator data, pg 291	Is there a description of the ATIS trip-planning system?	**CLARIFICATION:** The ATIS trip-planning system is a geo-graphically based, transit trip planner used by

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			KCM's Rider Information staff and provided as a web-based product for the general public. It plans one-way trips on KCM's scheduled service based on parameters input by the user (origin, destination, travel day and time). It receives a data set from KCM's TED similar to that which will be provided for the OBS and CCS, which includes routes, block trips, schedules, transfer points, stops, and other geographical information. The web-based version of this application is available for use at http://tripplanner.metrokc.gov/. For a description of data requirements for the OBS, see Subsection C.2.B, RV4-Update Vehicle Data. **ADD:** to Subsection C.2.B, RV-Update Vehicle Data, 5.1.1 Vehicle Data, Service-related vehicle data sets (5)(a) Service data sets will include the following information: Service (route, block trip, schedule, **transfer points** and stop) data.
20.	C.2.B.4.1.12 5.1 Performance 3)c), pg 306	What is the next run card information?	**CLARIFICATION:** See Appendix M, *Glossary of Terms and Acronyms* for the definition of "Run Card". The "run cards" are 5" x 8" paper summaries of each block of work which are provided to Operators assigned to the work. There is a clip provided on the vehicle near the existing MDT where Operators attach the run card for easy viewing. Each run card identifies the trips, routes, timepoints, destination sign codes and instructions for a specific work assignment. Attachment Four, provides a sample run card for the block (route/run) 015/42. Please note that the first revenue trip leaves Whitman Middle School at 2:31 PM and has estimated timepoints until the end of the trip at 1st Ave S. & S. Jackson Street. The destination sign code for this trip is "03C3".
21.	C.2.B.4.1.15 5.1 Performance, pg 329	What are the evidentiary rules for the methods and processes of transmitting and storing video files?	**CLARIFICATION:** Evidentiary rules are currently being drafted and are not yet available for dissemination.

Q #	Subsection	QUESTION	ANSWER
			Because the required OBS functionality for the secure transmission of DVRS files is now the same as that for the transmission of all files (see Answer 22 following), it is not expected that such rules will require additional methods or processes beyond those deemed adequate to meet the requirements of Part C, Subsection 2.A.1.7.4. Data Exchange Requirements (Software).
22.	C.2.B.4.1.15 5.3 Security Camera interface test cases 4), pg 330	How is the security of video files to be tested?	**CLARIFICATION:** At the time of this RFP's publication (June 2004), the DVRS was in implementation and security requirements for video file transmis-sion had not been fully determined. The DVRS is now fully operational and encrypts its own video files prior to wirelessly transmitting them to its "back office" Transit Police server when the coach returns to its Transit base. Additional security already in force includes the need to use special software to decrypt and read these files once they are successfully received by the Transit Police server. Because this existing level of security has been determined to be adequate, OBS security requirements will be limited to the secure, accurate transmission (tunneling) via the WDOLs of all encrypted video files provided to it by the DVRS system. Testing will be limited to those areas specified in Part C, Subsection 2.A.1.7.4. Data Exchange Requirements (Software). **ADD:** text to sixth bullet in C.2.B.4.1.15, 1. Brief Description, *Summary of key DVRS functions* list Saved events are automatically **encrypted and** off-loaded via a wireless LAN to the Transit Police server when a coach returns to the base. **ADD:** additional bullet to C.2.B.4.1.15, 1. Brief Description, *Summary of key DVRS functions* list **Saved events that are off-loaded as encrypted files to the Transit Police server require specialized software for viewing.**

Q #	Subsection	QUESTION	ANSWER
			DELETE: from 5.1 *Performance* the paragraph entitled *Provide security of video files* in its entirety 5.1 Performance ~~*Provide security of video files*~~ ~~*The methods and processes for transmission and storage of video files shall meet evidentiary rules.*~~ ~~The system design must address the specific requirements for the handling and storage of evidence that can be used in court.~~ ~~The methods and protocols for the handling of video files shall be approved by the King County Transit Police and Prosecuting Attorney's Office.~~ **REPLACE WITH:** 5.1 Performance **All contents deleted.**
Part C, SECTION 3 Level 2 Requirements			
23.	C.3.B CC3- Manage Revenue vehicles Polling 5.1 (1)	Please specify the most north west point and south east point of your service area in long and lat coordinates.	**CLARIFICATION:** KCM is not providing this information at this time. While King County comprises the majority of the KCM service area, KCM also operates service in neighboring counties. The definition of the KCM service boundaries for the OBS/CCS needs to consider existing and future service requirements. These will be determined in system design, based on discussions between the selected OBS/CCS contractor and KCM.
24.	C.3.B CC5- Initiate Communications to Revenue vehicle. Section 3.2.4 Support tunnel radio communications	How long do the vehicles typically stay the Downtown Seattle Transit Tunnel?	**CLARIFICATION:** Revenue vehicles typically take 10-12 minutes to travel through the Downtown Seattle Transit Tunnel, excluding delays due to incidents, mechanical breakdowns, etc. Some vehicles may layover approximately 30 minutes in the staging areas at the north or south entrances to the Tunnel before starting their trip through the Tunnel.
25.	CC15-Transition CCS 5.1.1 Retain existing data/voice mode	What is the interface to the indicator light alarm currently used? Are there multiple lights throughout the building?	**CLARIFICATION:** There are two data channel receivers in the current radio equipment room. Each receiver is tuned to a data channel. Audio output from

Q #	Subsection	QUESTION	ANSWER
	indicator light -1		the receivers is processed to provide a signal that drives green LED indicator lights. When a data signal is received, the green LED for that channel flashes and indicates that a data signal is being transmitted to the buses. If no data signal is received, a red LED lights up. The data-signal monitoring and LED driver circuitry was designed and built by KCM Radio Maintenance. The LED indicators are installed in the Communication Center and are visible from all coordinator consoles.
26.	Addenda #5 Question 66		Question 66 mentioned a letter from the FTA. A PDF of the letter is Attachment Five "On July 1, 2002 the General Manager of KCM received a letter from the FTA encouraging transit agencies to "be prepared in the event of a severe GPS outage". Steps that were recommended were to "conduct it's own GPS risk assessment" and "deploy backup systems or procedures". The implementation of OBS/CCS must include an agency plan to mitigate the degradation (selective availability) or loss of GPS and back up plans for service operations"

ATTACHMENT ONE: replacement worksheet "I. Level 1 Staffing v2" is provided as a separate Excel pdf *Attachment B.I_v2.xls* file attached to this Addendum 8. This worksheet should be inserted as the first worksheet into the Part A, Attachment B_Price.xls workbook (see Question 5 above).

ATTACHMENT TWO: replacement table for insertion into Part C as Table 2.A.1.6.4.3. KCM Equipment Communications Ports (see Question 10 above).

NOTE: This table was originally provided in Addendum 2 in response to Question 30.

Table 2.A.1.6.4.3. KCM Equipment Communications Ports

		Communications Ports					
KCM Subsystem	**# Ports**	**Ethernet**	**RS485**	**RS232**	**J1708**	**J1939**	**Coaxial**
AVI Tag (TSP)	1			RS232 TTL			
DDU	4	1 (connected to hub)	1 (spare)	2 (1 spare*)			
Dest. Signs: - Twin Visions - Luminator	 1 2		 1		 1 1		
DVRS - DVS-2 - DVS-3	 3 4	 1 (avail) 10/100 Base-T 2 (avail) 10/100 Base-T	 2 (1 in use) 2 (1 in use)				
ECM	2			1-diagnostics	1-J1708 or J1939		
FTP	2	1 (connected to hub)		1 (spare*)			
WDOLS - Cisco 1300	2	1 (LIM - connected to hub; FIM – connected to VLU)					1

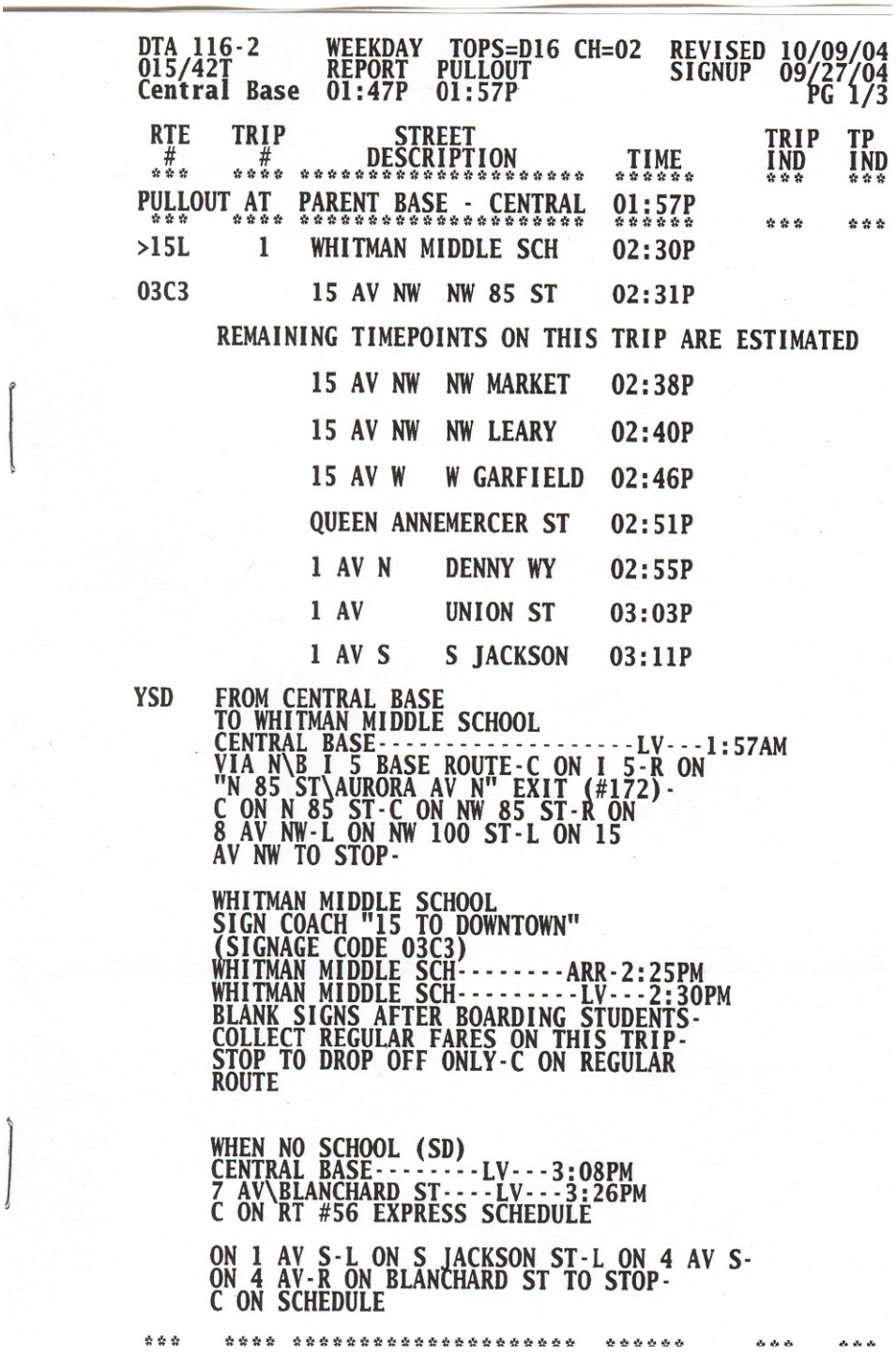
- These spare ports are periodically used to connect the diagnostic laptop computer.

ATTACHMENT THREE: replacement table for insertion into Part C as Table 1.C.5. Fleet and OBS Equipment Plan (see Question 14 above).

Table 1.C.5. Fleet and OBS Equipment Plan

KING COUNTY METRO				Fleet Size	Subsystems by Fleet Type				
Actuals	FLEET ID#	MFG	TYPE (# doors)	est 2006	VLU	APC (33%)	APC Sensors	AVM	Int. Signs
	3200	Gillig	40' diesel (2 dr)	**395**	395	130	520	0	395
	3100	Gillig	35' diesel (2 dr)	**15**	15	5	20	0	15
	1100	Gillig	30' diesel (1 dr)	**95**	95	31	62	95	95
	2300	New Flyer	60' diesel (2 dr)	**273**	273	90	360	273	546
	1200	Champion	25' diesel (1 dr)	**35**	35	12	24	0	0
	4100	Gillig	40' trolley (2 dr)	**100**	100	33	132	100	100
	3600	New Flyer	40' diesel (2 dr)	**100**	100	33	132	100	100
Planned	2600	New Flyer	60' hybrid (2 dr)	**213**	213	70	280	213	426
	2800	New Flyer	60' diesel (2 dr)	**30**	30	10	40	30	60
	4200	Breda	60' trolley (3 dr)	**50**	50	17	102	50	100
			Product Installed	**1,306**	**1,306**	**431**	**1,672**	**861**	**1,837**
			10% Spares	**131**	**131**	**43**	**167**	**86**	**184**
			Metro Product Subtotals	**1,437**	**1,437**	**474**	**1,839**	**947**	**2,021**
Sound	9000	Gillig	40' diesel (2 dr)	**51**	51	17	68	0	15
Transit	9500	New Flyer	60' diesel (2 dr)	**13**	13	4	16	13	26
	9600	New Flyer	60' hybrid (2 dr)	**22**	22	7	28	22	44
	9537-9552	New Flyer	60' diesel (2 dr)	**16**	16	5	20	16	32
			Product Installed	**102**	**102**	**33**	**132**	**51**	**117**
			10% Spare parts	**10**	**10**	**3**	**13**	**5**	**12**
			ST Product Subtotals	**112**	**112**	**36**	**145**	**56**	**129**
			Total Product Installed	**1,408**	**1,408**	**464**	**1,804**	**912**	**1,954**
			Total Spare parts	**141**	**141**	**46**	**180**	**91**	**196**
			Total Estimated Level 1 Product Procurement	**1,549**	**1,549**	**510**	**1,984**	**1,003**	**2,150**

ATTACHMENT FOUR: Sample Run Card for block (route/run) 015/42 (see Question 20).



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DTA 116-2      WEEKDAY  TOPS=D16 CH=02  REVISED 10/09/04
015/42T        REPORT   PULLOUT         SIGNUP  09/27/04
Central Base   01:47P   01:57P                    PG 1/3

 RTE   TRIP        STREET                          TRIP  TP
  #     #       DESCRIPTION          TIME          IND   IND
 ***   ****  **********************  ******        ***   ***
PULLOUT AT  PARENT BASE - CENTRAL  01:57P
 ***   ****  **********************  ******        ***   ***
>15L     1   WHITMAN MIDDLE SCH     02:30P

03C3         15 AV NW  NW 85 ST     02:31P

      REMAINING TIMEPOINTS ON THIS TRIP ARE ESTIMATED

             15 AV NW  NW MARKET    02:38P

             15 AV NW  NW LEARY     02:40P

             15 AV W   W GARFIELD   02:46P

             QUEEN ANNEMERCER ST    02:51P

             1 AV N    DENNY WY     02:55P

             1 AV      UNION ST     03:03P

             1 AV S    S JACKSON    03:11P

YSD    FROM CENTRAL BASE
       TO WHITMAN MIDDLE SCHOOL
       CENTRAL BASE------------------LV---1:57AM
       VIA N\B I 5 BASE ROUTE-C ON I 5-R ON
       "N 85 ST\AURORA AV N" EXIT (#172)-
       C ON N 85 ST-C ON NW 85 ST-R ON
       8 AV NW-L ON NW 100 ST-L ON 15
       AV NW TO STOP-

       WHITMAN MIDDLE SCHOOL
       SIGN COACH "15 TO DOWNTOWN"
       (SIGNAGE CODE 03C3)
       WHITMAN MIDDLE SCH--------ARR-2:25PM
       WHITMAN MIDDLE SCH---------LV---2:30PM
       BLANK SIGNS AFTER BOARDING STUDENTS-
       COLLECT REGULAR FARES ON THIS TRIP-
       STOP TO DROP OFF ONLY-C ON REGULAR
       ROUTE


       WHEN NO SCHOOL (SD)
       CENTRAL BASE--------LV---3:08PM
       7 AV\BLANCHARD ST----LV---3:26PM
       C ON RT #56 EXPRESS SCHEDULE

       ON 1 AV S-L ON S JACKSON ST-L ON 4 AV S-
       ON 4 AV-R ON BLANCHARD ST TO STOP-
       C ON SCHEDULE

 ***   ****  **********************  ******        ***   ***
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DTA 116-2 WEEKDAY TOPS=D16 CH=02 REVISED 10/09/04
015/42T SIGNUP 09/27/04
Central Base

RTE #	TRIP #	STREET DESCRIPTION		TIME	TRIP IND	TP IND
56L	2	7 AV	BLANCHARD	03:26P $	EE	
EE	OPERATE EXPRESS ROUTE AND INSTRUCTIONS					
0357		1 AV	UNION ST	03:33P $		
	REMAINING TIMEPOINTS ON THIS TRIP ARE ESTIMATED					
		1 AV	MARION ST	03:36P $		
		26 AV SW	SPOKANE ST	03:42P $		
		CALIF SW	SW ADMIRAL	03:47P $		
		61 AV SW	ALKI AV SW	03:54P $		
56L	3	61 AV SW	ALKI AV SW	04:25P $		
076A		CALIF SW	SW ADMIRAL	04:29P $		
		26 AV SW	SPOKANE ST	04:34P $		
		1 AV S	S SPOKANE	04:38P $		
		1 AV S	R BROUGHAM	04:46P $		
		1 AV S	S JACKSON	04:48P $		
		1 AV	UNION ST	04:55P $		
15L	4	1 AV	UNION ST	04:55P $		
00D3		1 AV N	DENNY WY	05:03P $		
		QUEEN ANNE	MERCER ST	05:07P $		
		15 AV W	W GARFIELD	05:12P $		
		15 AV NW	NW LEARY	05:19P $		
		15 AV NW	NW MARKET	05:21P $		
		15 AV NW	NW 85 ST	05:29P $		
		14 AV NW	NW 105 ST	05:34P $		
PULLIN	AT PARENT BASE - CENTRAL			06:02P		

DTA 116-2 WEEKDAY TOPS=D16 CH=02 REVISED 10/09/04
015/42T SIGNUP 09/27/04
Central Base PG 3/3

RTE #	TRIP #	STREET DESCRIPTION	TIME	TRIP IND	TP IND
***	****	**********	******	***	***

ATTENTION:
AMERICANS WITH DISABILITIES ACT REQUIRES
THAT TRANSIT OPERATORS ANNOUNCE STREETS
OVER THE PUBLIC ADDRESS SYSTEM
ON ALL ROUTES. THESE ANNOUNCEMENTS
REQUIRE BUT ARE NOT LIMITED TO
C.B.D. STREETS, MAJOR INTERSECTIONS,
TIME POINTS AND TRANSFER POINTS.

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ATTACHMENT FIVE:
FTA Letter of July 1, 2002 (see Question 26). Attached as a separate document

U.S. Department
of Transportation
Federal Transit
Administration

Administrator

400 Seventh St. S.W.
Washington, D.C. 20590

Dear Colleague:

In recent years, there has been an increasing reliance by transportation systems on Global Positioning System (GPS). In March 2002, the Department of Transportation formally accepted recommendations made in the Vulnerability Assessment of the Transportation Infrastructure Relying on the Global Positioning System (Report) dated August 29, 2001. The Report was written by the Volpe National Transportation Systems Center in response to a Presidential Decision Directive. The Report is an assessment of whether appropriate policies, plans, and activities are either in place or underway to mitigate the vulnerabilities of the GPS.

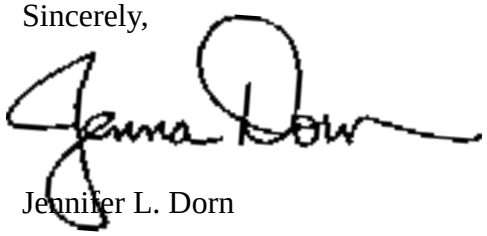
The Federal Transit Administration (FTA) encourages each transit agency that employs or plans to use GPS systems to conduct its own GPS risk assessment. Transit Intelligent Transportation System (lTS) applications of GPS typically include Automatic Vehicle Location (AVL) for operations management, including locating vehicles during emergencies and mechanical failures. However, widespread integration of other transit ITS technologies such as automatic passenger counters, automatic traveler information systems, navigation and route guidance systems, and others are increasingly dependent on GPS signals. Most AVL systems feed location of paratransit fleets and provide real-time transit information for travelers at kiosks, in stations, or on the internet.

In the event of a severe GPS outage, many lTS systems will be rendered inoperable. In order to mitigate these vulnerabilities, FTA encourages transit agencies to deploy backup systems or procedures. Transit agencies also are encouraged to train personnel to recognize non-standard GPS performance and become familiar with use of back-up systems and procedures. At a minimum, transit agencies can revert back to systems and operating procedures used for locating vehicles prior to the use of GPS. In emergency situations where a transit vehicle needs to be located, an operator can send a priority request to talk to the dispatcher and then describe the vehicle's location via the voice radio.

In light of renewed emphasis on reinforcing our nations security systems, I believe a self-assessment of GPS vulnerability is timely. Your attention to providing for policies and backup plans in the event of a GPS outage will ensure the vitality of the transportation

infrastructure. For further information, the Volpe report, *Vulnerability Assessment of the Transportation Infrastructure Relying on the Global Positioning System*, is available through the Coast Guard Navigation Center website at http://www.navcen.uscg.gov. I thank you in advance for heightening your awareness of this issue.

Sincerely,



Jennifer L. Dorn